

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An intraluminal catheter comprising:
 - a) an elongated catheter shaft having proximal and distal ends, ~~a port in the distal end, and an inner lumen extending at least within a distal portion of the catheter shaft to the port in the distal end~~ an inflation lumen, a guidewire lumen, an outer tubular member having the inflation lumen therein, and an inner tubular member defining the guidewire lumen, the inner tubular member having an expanded portion of cylindrical shape with an outer diameter greater than an outer diameter of an unexpanded portion of the inner tubular member proximal to the expanded portion and with an inner diameter greater than an inner diameter of the unexpanded portion of the inner tubular member; and
 - b) ~~a distal extremity of the catheter shaft having a tubular portion with a balloon~~ on a distal shaft section having a proximal skirt section secured to the outer tubular member and a distal skirt section secured to the inner tubular member so that an inflatable interior of the balloon is in fluid communication with the inflation lumen ~~attached thereto and with an expanded section of cylindrical shape having an outer diameter greater than an outer diameter of an unexpanded section of the tubular portion proximal to the expanded section.~~

2. (currently amended) The intraluminal catheter of claim 1 wherein the expanded ~~section~~ portion of the ~~distal tubular extremity~~ inner tubular member has a length of about 0.1 to about 1 cm.

3. (currently amended) The intraluminal catheter of claim 1 wherein the expanded ~~section~~ portion of the ~~distal tubular extremity~~ inner tubular member has a length of about 0.2 to about 0.5 cm.

4. (currently amended) The intraluminal catheter of claim 1 wherein a portion of the ~~distal tubular extremity~~ inner tubular member distal to the expanded portion is unexpanded with a smaller outer diameter than the expanded portion.

5. (currently amended) The intraluminal catheter of claim ~~[[1]]~~ 4 wherein the length of the ~~distal tubular extremity including~~ inner tubular member along the expanded portion and the distal unexpanded portion is about 0.2 to about 1.3 cm.

6. (currently amended) The intraluminal catheter of claim 4 wherein the unexpanded portion of the ~~distal tubular extremity~~ inner tubular member distal to the expanded portion has smaller transverse dimensions than transverse dimensions of the unexpanded portion of the ~~distal tubular extremity~~ inner tubular member proximal to the expanded portion thereof.

Claims 7-13 (Canceled)

14. (Withdrawn) A balloon catheter comprising:

a) an elongated catheter shaft having proximal and distal ends, a port in the distal end, a guidewire lumen extending at least within a distal portion of the catheter

to and in fluid communication with the port in the distal end and an inflation lumen extending through the catheter shaft to a location spaced proximal to the distal end;

b) a balloon on the distal portion of the catheter shaft having an interior chamber which is in fluid communication with the inflation lumen and a distal skirt;

c) an inner tubular member extending through the interior chamber of the balloon, having the distal balloon skirt secured to an exterior location on the inner tubular member and having an expanded portion extending beyond the distal skirt of the balloon which has inner transverse dimensions greater than inner dimensions of the distal skirt of the balloon.

15 . (Withdrawn) The catheter of claim 14 wherein the inner tubular member has a portion distal to the expanded distal shaft extremity which tapers to outer transverse dimensions smaller than the outer transverse dimensions of the expanded distal extremity.

16 . (Withdrawn) The catheter of claim 15 wherein the tapered portion distal to the expanded portion has transverse dimensions smaller than transverse dimensions of the unexpanded portion proximal to the expanded portion.

17 . (Withdrawn) The catheter of claim 14 wherein the expanded distal shaft extremity has a length of about 0.1 to about 1 cm.

18 . (Withdrawn) The catheter of claim 14 wherein the expanded distal shaft extremity has a length of about 0.2 to about 0.5 cm.

19 . (Withdrawn) The catheter of claim 14 wherein a portion of the distal tubular extremity distal to the expanded portion is unexpanded.

20 . (Withdrawn) The catheter of claim 14 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.2 to about 1.5.

21 . (Withdrawn) The catheter of claim 14 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.3 to about 0.7.

22 . (Withdrawn) The catheter of claim 14 wherein the expanded portion of the inner tubular member has a cylindrical shape.

23 . (Withdrawn) A rapid exchange-type dilatation catheter comprising:

a) an elongated catheter shaft having proximal and distal ends, a first port in the distal end, a second port spaced a short distal proximal to the distal end and a substantial distance from the proximal end of the catheter shaft, a guidewire lumen which is disposed at least within a distal portion of the catheter shaft and which extends between and is in fluid communication with the first port and with the second port, an inflation lumen extending through the catheter shaft to a location spaced proximal to the distal end;

b) a balloon on the distal portion of the catheter shaft which has an interior chamber in fluid communication with the inflation lumen and which has a distal skirt;

c) an inner tubular member extending through the interior chamber of the balloon, with a distal skirt of the balloon secured to an exterior location on the inner tubular member; and

d) a distal shaft extremity distal to the exterior location which is at least in part expanded and which has inner transverse dimensions greater than inner dimensions of the distal skirt of the balloon.

24 . (Withdrawn) The rapid exchange dilatation catheter of claim 23 wherein the inner tubular member has a portion distal to the expanded distal shaft extremity which tapers to outer transverse dimensions smaller than the outer transverse dimensions of the expanded distal extremity.

25 . (Withdrawn) The rapid exchange type balloon catheter of claim 24 wherein the tapered portion distal to the expanded portion has transverse dimensions smaller than transverse dimensions of the unexpanded portion proximal to the expanded portion.

26 . (Withdrawn) The rapid exchange type balloon catheter of claim 23 wherein the expanded distal shaft extremity has a length of about 0.1 to about 1 cm.

27 . (Withdrawn) The rapid exchange type balloon catheter of claim 23 wherein the expanded distal shaft extremity has a length of about 0.2 to about 0.5 cm.

28 . (Withdrawn) The rapid exchange type balloon catheter of claim 23 wherein a portion of the distal tubular extremity distal to the expanded portion is unexpanded.

29 . (Withdrawn) The rapid exchange type balloon catheter of claim 23 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.2 to about 1.5.

30 . (Withdrawn) The rapid exchange type balloon catheter of claim 23 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.3 to 0.7.

31 . (New) The intraluminal catheter of claim 1 wherein the inner tubular member expanded portion is located distal to the balloon distal skirt section.

32. (New) The intraluminal catheter of claim 1 wherein the inner tubular member unexpanded portion is located distal to the inflatable interior of the balloon.

33. (New) A balloon catheter, comprising:

a) an elongated shaft having a proximal end, a distal end, an inflation lumen, a guidewire lumen, and a distal end section of the shaft which has an inner surface which defines a section of the guidewire lumen and which has an expanded portion with

a larger outer diameter and a larger inner diameter than an unexpanded portion of the shaft distal end section located proximal to the expanded portion; and

b) a balloon secured to the shaft, so that an inflatable interior of the balloon is in fluid communication with the inflation lumen, and the inflatable interior of the balloon is located proximal to the expanded portion of the distal end section of the shaft.